



Fire Disturbance – Vegetation Dynamics Breakout Session



## 4 Main Topics:

- 1) Outreach
- 2) Data sharing/workshop(s)
- 3) Vegetation mapping
- 4) Non-fire disturbances

# Outreach

Opportunities for capacity building and public outreach abound across the ABoVE Study Domain, including communications activities that are necessary to inform and fully engage important stakeholders at all stages. Researchers will be expected to take advantage of time in the field to work with community colleges, museums, community centers, tribal councils, and other local organizations in outreach activities. In addition to participating in meetings or public presentations, researchers should also expect to meet with members of the local print and broadcast media. Proposers should assume that the CCEO will be available to coordinate these activities and may assist in organizing many of them.



# Outreach

## Examples:

- Have manager/stakeholder engaged in fieldwork: bi-lateral education, learn limitations. Safety training/requirements a potential hiccup
- On-campus seminars @ universities
- NPS: evening chats, educational materials, science schools
- FWS Science camp
- Potential for ABoVE science curricula @ various levels (grade school – graduate)
- Pointed out that no stakeholders from education @ meeting
- Skip Walker: 2-week science course (Arctic AK Env. Change), excursion to the N Slope
- Laura Conner (UAF): leads program on K-12 education
- NASA: Earth to Sky program
- AK Fire Science Consortium: webinars, mailing list
- Local communities
- IARPC
- Set up ABoVE outreach site w/links, examples



# Data sharing/workshop(s)

## For ABoVE investigators:

- Learn about/how to use the wide variety of data sets available to team. Attendees volunteer to instruct on one they're familiar with
- Portal on website with links, clear documentation/layout on ASC

## For stakeholders/the public:

- Science Team meetings in later years (Y3/4) invite stakeholders to attend & learn about products. Break out by themes.
- ABoVE website dedicated to ABoVE-specific data products, easy to use, graphical interface. Issue of website legacy when project is over (e.g., Walker's pre-ABoVE)



# Vegetation mapping

## Operational, Landfire:

- 30m vegetation mapping effort, variety of layers and applications (e.g., vegetation cover, type, height, fuels). Used operationally in fire management during active fires to predict behavior/spread. Also allocation of funding based on fuels flammability.
- Updated regularly based on disturbances, but in AK limited validation data and low accuracy level (40%).
- Opportunity to leverage some of our vegetation mapping efforts: FTE, shrubs, peatlands, G-LiHT, Walker's database, AHAP. Will be issues of classification
- Good to organize a webinar/virtual meeting: Landfire/FIA/BLM/NSSI/NPS/ABoVE

## Other:

- For ABoVE projects, issue of leveraging existing plot-level information (e.g., Dalton highway) vs. new areas
- Issue of changing vegetation/fire severity from long-term satellite records (Landsat). Many issues with quality/consistency/coverage (clouds).
- Validation/uncertainty very important, especially how derived.



# Non-fire disturbances

Not currently being investigated

Permafrost thaw effects on infrastructure:

- Obvious direct societal impacts
- What scale and sensors? High-res imagery could be very valuable

Pests and pathogens:

- As or more important than fire parts of ABoVE (e.g., British Columbia, Alberta)
- In AK, Forest Health Program (USFS/DNR) provides yearly aerial coverage

